



July 8, 2016

Michelle Kaysen
USEPA Region 5, Mail Code LU-9J
77 West Jackson Boulevard
Chicago, IL 60604

RE: Second Quarter 2016 Progress Report, Hartford Petroleum Release Site

Dear Ms. Kaysen,

212 Environmental Consulting, LLC (212 Environmental) is submitting this quarterly report summarizing the progress and status of activities performed at the Hartford Petroleum Release Site (Hartford Site) on behalf of Apex Oil Company, Inc. (Apex) for the time period from April 1, 2016 to June 30, 2016.

1. The following deliverables were submitted by Apex during the second quarter 2016:
 - The *First Quarter 2016 Sentinel Well Monitoring Summary Report* was submitted to the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (Illinois EPA) on April 7, 2016 via standard mail.
 - The *Draft Dissolved Phase Investigation Report, Hartford Petroleum Release Site, Hartford, Illinois* was submitted to the USEPA and Illinois EPA on April 8, 2016 via standard mail and email.
 - The *First Quarter 2016 Progress Report* was submitted to the USEPA and the Illinois EPA on April 15, 2016 via email.
2. The following requests and notifications pertaining to activities at the Hartford Site were submitted by Apex during the second quarter 2016:
 - The USEPA and Illinois EPA were provided notification of a response to an odor complaint at 123 West Elm Street by Apex field personnel on April 15, 2016. The results of the in-home monitoring activities indicated that the source of the odor was not related to petroleum hydrocarbons.
 - The USEPA and Illinois EPA were provided notification of initiation of river stage triggered monitoring event EBMP-29 and implementation of interim in-home event based monitoring activities on May 1, 2016.
 - The USEPA and Illinois EPA were provided daily notifications regarding field activities and monitoring results between May 4 and 12, 2016 during river stage triggered monitoring event EBMP-29.



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- The USEPA and Illinois EPA were provided notification of initiation of river stage triggered monitoring event EBMP-30 and a request to modify the scope of monitoring activities associated with the event on May 31, 2016. The USEPA provided approval of the modified scope on June 2, 2016 via email.
 - The USEPA and Illinois EPA were provided notifications regarding field activities and monitoring results on June 3 and June 6, 2016 during river stage triggered monitoring event EBMP-30.
3. Apex participated in the following meetings and teleconferences during the second quarter 2016:
- Teleconference with the USEPA and TetraTech (USEPA technical review contractor) to discuss the numerical USCS classifications to be incorporated into the 3-dimensional visualization for the *Soil Vapor Extraction System Effectiveness Zone 6 Optimization Report* was conducted on April 13, 2016.
 - Meeting with the USEPA, Illinois EPA, and TetraTech to discuss the draft *Dissolved Phase Investigation Report* and enhanced total phase extraction test results was conducted on April 27, 2016.
 - The Fourth Community Focus Group meeting with the USEPA, Illinois EPA, and invited stakeholders was convened on May 24, 2016. This meeting was re-scheduled due to inclement weather that occurred on April 26, 2016.
 - Teleconference with the USEPA, Illinois EPA, and TetraTech to discuss the *Effectiveness Zone 6 Optimization Report*, the *Dissolved Phase Investigation Report*, and updates to the compliance calendar was conducted on June 8, 2016. A summary of this teleconference along with the updated compliance calendar was submitted to the USEPA, Illinois EPA, and TetraTech on June 17, 2016.
 - Teleconference with the USEPA, Illinois EPA, and TetraTech to discuss revisions to the *Dissolved Phase Investigation Report* was conducted on June 16, 2016.
4. Apex completed the following in-home effectiveness monitoring activities:
- Weekly in-home effectiveness monitoring was performed within nine structures at the Hartford Site during the second quarter 2016.
 - Quarterly in-home effectiveness monitoring was performed in 32 structures at the Hartford Site between May 3 and 9, 2016.
 - In-home effectiveness monitoring was conducted within 26 structures at the Hartford Site in response to river stage triggered monitoring event (EBMP-29) between May 3 and 9, 2016.
 - In-home effectiveness monitoring was conducted within eleven structures at the Hartford Site in response to river stage triggered monitoring event (EBMP-30) between June 1 and 3,



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2016. The reduced scope of monitoring activities was approved by the USEPA on June 2, 2016.

5. Apex completed the following dissolved phase investigation activities:

- Quarterly manual fluid level gauging within 376 groundwater monitoring wells and multipurpose monitoring points was completed between April 27 and 28, 2016.
- Groundwater samples were collected and analyzed from the five sentinel monitoring wells on June 22, 2016.
- Groundwater samples were collected and analyzed from four additional monitoring wells and monitoring points between June 23 and 24, 2016.

6. Apex completed the following operations, maintenance, and monitoring (OMM) activities with soil vapor extraction (SVE) system during the second quarter 2016:

- Routine monitoring within vapor collection system components was conducted during the second quarter 2016 including: (1) fluid level gauging; (2) measuring vacuum, air flow, and temperature; and (3) screening total organic vapor concentrations within operating SVE wells.
- Routine operations within the vapor collection system components was conducted during the second quarter 2016 including adjustments to stingers and valve positions within individual wells, as well as sweeping of the horizontal transmission lines to remove accumulated groundwater.
- Effectiveness monitoring for the vapor collection system was conducted within 124 nested soil vapor monitoring wells and multipurpose monitoring points between February 4 and 8, 2016.
- Routine OMM of the thermal treatment system components was performed throughout the second quarter 2016.

7. Activities planned during the third quarter 2016 at the Harford Site:

- Conduct routine OMM of the vapor collection and thermal treatment components of the SVE system in accordance with the approved *Vapor Collection System Operation, Maintenance, and Monitoring Plan* (Trihydro 2015) and *HSVE Monitoring and Maintenance Manual* (URS 2014).
- Conduct quarterly effectiveness monitoring within the multipurpose monitoring points and soil vapor monitoring wells in accordance with the approved *Effectiveness Monitoring Plan* (URS 2014) in August 2016.
- Conduct quarterly in-home effectiveness monitoring in August 2016 in accordance with the *Final Interim In-Home Effectiveness Monitoring Plan* (Trihydro 2014).



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- Continue weekly in-home effectiveness monitoring within nine structures in accordance with the *Final Interim In-Home Effectiveness Monitoring Plan* (Trihydro 2014).
- Conduct river stage triggered monitoring in accordance with the triggers established within the *Final Interim In-Home Effectiveness Monitoring Plan* (Trihydro 2014).
- Continue dissolved phase investigation activities in accordance with the *Final Dissolved Phase Investigation Work Plan* (Trihydro 2013) including: (1) quarterly fluid level gauging, (2) groundwater sampling, and (3) data reduction, analysis, and reporting.
- Conduct quarterly groundwater monitoring of the five sentinel wells located south of the Hartford Site in September 2016.
- Participate in routine teleconferences and meetings with the USEPA and Illinois EPA.

We appreciate your continued engagement with this project. If you have any questions or require any additional information, please contact me at (513) 430-1766.

Sincerely,

Paul Michalski, P.G.
Senior Hydrogeologist

cc: James F. Sanders, Apex Oil Company, Inc.
Tom Miller, Illinois Environmental Protection Agency
Chris Cahnovsky, Illinois Environmental Protection Agency